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ABSTRACT

In the fall of 1966 about 30 upper achievement level students were given permission to plan for themselves how they would schedule each days academic activities according to what these needs might be for that particular day. In subsequent years, this Self-Imposed Scheduling (SIS) Program was expanded to 1,000 students. S.I.S. offers to the student increased opportunities to self actualize by providing a chance to make, under guidance, certain choices--to carry them through--and to evaluate the results of these choices. The purpose of S.I.S. is to offer a program within the high school in which, under guidance, the student can learn and practice a valuable and necessary skill, the taking of responsibility. Evaluation of the program showed: (1) the S.I.S. program did not negatively effect the grades of S.I.S. students; (2) S.I.S. students self-impose from their classes an average of about one-third of their authorized time; (3) faculty enthusiasm waned; (4) parents had a positive attitude toward the program and felt it should be continued; and (5) S.I.S. students now in college felt they benefited from the program and felt that it should be continued. (KJ)

OE/BESE
TITLE III

The Elk Grove Training and Development Center
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1706 West Algonquin Rd., Arlington Heights, Ill. 60005

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FINAL REPORT

SELF IMPOSED SCHEDULING PROGRAM

1967 - 1969

"I'M PROGRESSING AT MY OWN RATE...WHOSE RATE ARE YOU PROGRESSING AT?"

CG004980

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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SELF IMPOSED SCHEDULING PROGRAM

E.S.E.A. Title III

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I. OVERVIEW OF THE PROGRAM

Self Imposed Schedule

Component of the Program

Activities:

Demonstration services were scheduled according to request of visitors. Whenever possible, demonstrations were scheduled for Wednesday and Thursday mornings from 9:00 to about 11:30 a.m. Also, when possible, the number of visitors at any one time was kept to a maximum of 20 visitors. We tried to be as flexible as possible and usually accommodated any visitors.

There were both internal and external training services.

Internally, both teachers and students were involved in different types of activities, the nature of which was usually determined by the need. The faculty had been involved in bi-monthly in-service training sessions since November. There were 7 groups of teachers, with a total of 40-50 participating in these training sessions. - Released time was used here.

Externally, training services were designed and responded to according to requests - these types of services can take the form of seminars, demonstrations, and consulting services.

Personnel:

The personnel concerned with producing this program were: The coordinator, one part-time secretary, teachers, students, and administrators.

The consumers of the S.I.S. program were the teachers, administrators, and students in Elk Grove High School. The S.I.S. program was a team effort. It couldn't have functioned satisfactorily any other way.

Location:

The Self Imposed Schedule Program operated at Elk Grove High School, 500 Elk Grove Blvd., Elk Grove Village, Illinois. Elk Grove High School is one of six high schools in the Arlington Heights High School District #214. All of the production facilities, viz., office, demonstration and training facilities were located at Elk Grove High School. The student population during the 1968-1969 school year was about 2350.

Curriculum:

The program was involved in some manner and to some extent with the total curriculum of Elk Grove High School, except for the Physical Education curriculum.

II. RATIONALE

Local History

The Self-Imposed Schedule Program dates back to 1966, the year Elk Grove High School opened for the first time. The concept originated with Mr. Donald Fyfe, Assistant Principal; Mr. Richard Calisch, Division Chairman, English Fine Arts Division; Mr. Merrill Froney, Division Chairman, Math & Science Division; and had the support of the Principal, Dr. Donald Thomas. Dr. Thomas was rather deeply affected by the Maslowian philosophy of Self-Actualization and believed that students as well as teachers should have a say in how to meet and cope with their individual needs.

In the fall of 1966 about thirty upper achievement level students were given permission to plan for themselves how they would schedule each days academic activities according to what these needs might be for that particular day. During this time, the Assistant Principal, Mr. Donald Fyfe managed the program.

About February of 1967, several administrators from the Elk Grove Training and Development Center visited with Dr. Thomas and Mr. Fyfe concerning the possibility of expanding the S.I.S. program and making it one of the Training and Development Center's Model programs. The Training and Development Center offered to assume the major financial burden for doing this. A proposal for S.I.S. to become a Model Program was submitted to the T & D Center and was approved by the T & D staff and the T & D Advisory Board.

A full-time person was then appointed as a Coordinator for S.I.S. and it was expanded to include about 200 students.

The program gained support from the faculty and the new principal, Mr. Robert Haskell.

Dr. Thomas became Superintendent of Elk Grove School District 59 during the interim.

During the Fall of 1967 the program was again expanded to the size of about 600 students, and further expanded during the 1968-1969 school year to include over 1000 students.

S E L F - I M P O S E D S C H E D U L I N G

Documentation and Research

Responsibility must be learned; it is not likely that a student will progress toward the ability to assume responsibility successfully unless he is given an opportunity to attempt it. As with driving a car, reading or hearing about it is not enough. There must be opportunity for the learner to participate in the activity. In mathematics, spelling, or the other academic disciplines, the school supplies ample opportunity for the fledgling to try his wings; but if the school conceives of one of its goals as the teaching of the ability to accept responsibility, then some special attention must be given to a revision of the traditional concept of the school's role in directing the students' day.

Recent research has suggested that the appropriate unit of analysis should be "the student in the school". By this it is meant that the social needs and satisfactions of students should be considered vis-a-vis the requirements of the school as an efficient organization, (having a formal organization structure, directive leadership, and aspects of managerial control)[1]. Maslow takes the position that intrinsic learning is the ultimate goal of education and that this goal can but be realized in a self-actualizing learning environment[2].

Charles Mulford refers to a lack of congruency between the social-psychological needs of the students (student self-actualization) and the organizational requirements of the educational system and that any individual involved in any relationship (including students enrolled in schools) necessarily surrenders some "Freedom" and degrees of personal autonomy. Mulford maintains that a healthy balance between social needs and organizational requirements is necessary [3].

Mulford supports his position with research indicating a significant relationship between student self-actualization, school academic success and achievement[3].

A study by James Mitchell concerning the high school learning environment indicated a high correlation between contentment with school environment and the high school characteristic index scores[4].

Rachael Kaplan investigating and manifestations of neural trace persistance found that there are meaningful, orderly differences in the ways students perceive and think. Therefore, the education process might start with a knowledge of and a respect for the pattern of dimension characteristics of each individual[5].

Clark Webb comparing learning differences betwen teacher-centered teaching methods found that the students with the greatest learning autonomy made the most gains in achievement[6].

Sidney Jourard, concerned with the need to recast the image of man from a passive, inactive recipient, to an active, autonomous and reflective being, takes the position:

> That independent learning is problematic is most peculiar, because man always and only learns by himself. The real question here is what does he learn, and for whom? Learning is not a task or problem; it is a way to be in the world. Man learns as he pursues goals and projects that have meaning for him. He is always learning something. Perhaps the key to the problem of independent learning lies in the phrase - the learner has the need and the capacity to assume responsibility for his own continuing learning. It may well be that those who train young people in the ways of their group, which is a most necessary task, have over-reached the mark. They have trained youngsters to believe that they cannot dare not learn anything without a teacher being close at hand. Or they may have persuaded them to believe that once they have learned this they don't have to learn over again. They will have it made.
>
> Most youngsters, being human, independently learn something meaningful to them; namely, that it is dangerous or futile to become interested in something, to learn for oneself. It is only safe to learn for the teacher or for society's approval. One set of image molders or model implementers, the teachers (and I would rather call them the trainers) have been commissioned by social leaders to shape youngsters to an acquiescent mold. They implement their commission by invalidating a child's experience of spontaneous curiosity and fascination with respect to the world. They insist he learn only when and what he is taught. He must learn for others. The teachers and parents have robbed the children of their autonomy, their capacity to experience amazement, wonder, and fascination by invalidating it whenever it appears. They look at their product and find it wanting. They have produced a Colem, a humanoid, a dependent learner. Now, we here are asked to breathe life into it. We are caught on the horns of a dilemma. Children must be shown the ways of their groups. They must be trained, but they must also be able to transcend this training and learn for themselves if they are to experience their lives as meaningful and if the society in which they live is to grow and change[7].

Goodwin Watson has explored the basic psychological learning theories and has come up with a set of what he refers to as propositions[8]. Among Watson's propositions are the following:

> Children are more apt to throw themselves wholeheartedly into any project if they themselves participated in the selection and planning of the enterprise.
>
> Reaction to excessive direction by the teacher is likely to be: (a) apathetic conformity, (b) defiance, (c) scapegoating, or (d) escape from the whole affair. Autocratic leadership has been found to increase dependence of members on the leader and to generate resentment (conscious or unconscious) which finds expression in attacks on weaker figures or even in sabotage of the work.
>
> Over-strict discipline is associated with more conformity, anxiety, shyness, and acquiescence in children; greater permissiveness is associated with more initiative and creativity in children.
>
> No two people make the same response to any school situation. Differences of heredity, physical maturity, intelligence, motor skills, health, experiences with parents, siblings, playmates; consequent attitudes, motives, drives, tastes, fears - all these and more enter into production of each individual's unique reaction. People vary in their minds and personalities as much as in their appearance.
>
> Pupils learn much from one another; those who have been together for years learn new material more easily from one of their own group than they do from strangers.

Traditionally, the school provides little student learning autonomy, few accommodations for student differences or opportunities for a student to self-actualize. The school is restrictive, it moves the student about from room to room checking him in and out wherever he goes. The student has very little control over his own actions. If he is not where he should be, he is at fault and is disciplined.

He gets little opportunity to take the responsibility for deciding what daily activities are most valuable to him, how he might most profitably spend his time, and which choices will take precedence over others. The SELF-IMPOSED SCHEDULING Program is an attempt to modify this.

S.I.S. offers to the student increased opportunities to self-actualize by providing a chance to make, under guidance, certain choices - to carry them through - and to evaluate the results of these choices. The S.I.S. student is allowed to miss classes he wishes to and to substitute attendance at other classes, labs, resource centers, or study halls. He may even choose to relax in the cafeteria over a coke. It is, however, necessary that he be willing to take the responsibility for his choices; the S.I.S. Coordinator is available to counsel him. The assumption is that the student may, from time to time, have obligations which he feels take precedence over his school-directed activities. The responsibility for making the choice is placed upon the student.

The opportunity to make one's own choices and the necessity to live with them once they are made are sobering facts of adult life which too many young people are faced with after high school graduation without having had any preparation. The purpose of S.I.S. is to offer a program within the high school in which, under guidance, the student can learn and practice this valuable and necessary skill, the taking of responsibility.

III PURPOSE

Purpose of the Model Program

Values, Beliefs, Assumption
(See Rationale - Supporting Documentation)

Promise for Educational Change

The purpose of S.I.S. is to help the student to develop his responsibility and self-reliance to a more mature level by offering to him a controlled learning environment in which to get more first hand experience in making certain important decisions concerning his involvement with the learning process. In order to operationalize this purpose, S.I.S. students will be given a controlled learning environment with the following options:

1. The option to choose whether or not to attend class on any given day.

   This option carries with it the responsibility and self-reliance to get assignments without disturbing the class, or inconveniencing the teacher.

   This option carries with it the responsibility to maintain good rapport with the classroom teacher.

   This option carries with it the responsibility of using and developing good judgement in making decisions about when to cut class.

2. The option to choose (his learning environment) where (the area in the school) he will study - library, resource centers, cafeteria, empty classroom, etc.

   This option carries with it the responsibility to move through the school to these study or learning areas without disturbing the general learning environment of the school.

3. The option to select what he will study - according to priority of needs, interests, etc.

   This option carries with it the responsibility to maintain quality work and not neglect other subjects of lesser interest.

4. The option to choose with whom he will study.

   This option carries with it the responsibility to do his own work and not let others do it for him.

   This option carries with it the responsibility to study in a manner not annoying or disturbing to others.

5. The option to choose not to study.

   This option carries with it the responsibility to learn how to budget time so that quality of work is maintained and handed in on time.

6. The option to fail subjects.

   This option carries with it the responsibility to accept the consequences for making inappropriate decisions. Inappropriate decisions are those resulting in outcomes undesirable to students and faculty.

Objectives - Professional Staff

Teachers will re-evaluate their roles in the classroom with respect to answering the following questions: (These are the original objectives and have not been changed; they remain the objectives of the program.)

To what degree and in what ways are teachers needed by the class to enable it to function at its present level?

To what degree and in what ways is the classroom teacher serving the individual students in helping them with their individual and unique learning problems?

To what degree and in what ways has the classroom teacher organized the classroom management around the types of activities which make the work easiest for him?

To what degree and in what ways are learning activities designed around student needs?

To what degree and in what ways are learning activities designed around meeting teacher needs first and student needs second?

To what degree and in what ways are teachers depending upon compulsory attendance in order to get student involvement with their subject matter area.

To what degree and in what ways does the teacher rely upon "busy-work" for the student in order to fill up classroom time?

The S.I.S. Program will provide teachers with greater flexibility for the learning environment and as a result of this the teachers will have broader opportunities to develop these professional skills, viz.

Teachers will have increased opportunities to develop their creativity in finding new ways to make use of the increased flexibility.

Increased flexibility will provide more opportunities for using team-approach to teaching.

The increased flexibility will provide more opportunities for developing cooperative working relationships with other teachers in the same subject matter area.

The increased flexibility will provide more opportunities for developing cooperative working relationships among teachers of different subject matter areas.

The increased flexibility will provide more opportunities for teachers to work in more intimate relationships with students who require more personal and individualized approaches to learning.

Relation of the Model Program to the Basic Questions of T & D

Describe the ways in which the professionals involved in your model program might be more willing to expose and study, openly and objectively, their own behavior as a result of their involvement in the program. (See III - Objectives - Professional Staff)

Describe the ways in which the professionals involved in the model program might change their role perceptions (self and other). (See III - Objectives - Professional Staff)

Describe the specific skills the professionals involved in the model program might acquire. (See III - Objectives - Professional Staff)

Describe the ways in which the learning outcomes of students might be related to the anticipated learning outcomes implied in questions 1-3 above. (See Appendix A - Student Learner Objectives)

IV ACTIVITIES

Staff Utilization

Involve staff in determining the eligibility of each application. (See Criteria for Determining Eligibility for S.I.S.)

Involve staff in assisting students with any individual type projects they wish to pursue.

Involve staff in devising and providing for study and resource areas.

Because of the flexibility inherent in the program, many opportunities exist for developing special courses - either of a remedial or of an advanced nature.

In the past, this aspect of staff utilization has played in important part in the S.I.S. program and it will continue to be a challenge to S.I.S. to develop this aspect.

Coordinator's Activities

Management Activities

Setting up machinery for efficient functioning of the program.

Processing student applications.

Planning S.I.S. policy with faculty and faculty committee and administration.

Working with student S.I.S. committee.

Involvement with T & D activities.

Maintaining communication between students and teachers.

Criteria for Determining Student Eligibility for S.I.S.

S.I.S. is open to tenth, eleventh, and twelfth grade and second semester ninth grade students.

Any student in the above category may submit an application for S.I.S.

Admittance to S.I.S. will be determined by the following:

Approval of student's teachers and counselor.

Approval by the student's parents.

Agreement by the student that he will accept the responsibilities required by S.I.S. policy.

Approval of Coordinator.

Training Activities for Staff Members

All training activities are designed for teachers who are involved with the S.I.S. program, and are of a kind that will compliment the growth and upgrade the quality of the over-all program. The following is a list of these initial activities for the 1968-69 school year:

Orientation and involvement of teachers new to Elk Grove High School.

Strategy - work with these new teachers in small groups of about eight members. Included with these new teachers is one staff member who had several years experience working successfully with the S.I.S. program and who is supportive of it.

These groups will meet during the regular school day, once or twice a month from September to December. Released time money will be used to make this possible. During these small group sessions opportunity will be provided to interact with members of the school administration as well as members of their own peer group. The purpose of these sessions will be to:

Provide a support group in which to share the kinds of problems not only common to teachers working in a new setting, but also those kinds of problems peculiar to a program like S.I.S.

Provide opportunity to interact with members of the administrative staff.

To involve new teachers in the maintenance, planning and development of the S.I.S. program.

Similar small groups will be formed with second year teachers. An added component to these groups, however, will be parents of children who are on S.I.S. This will provide a setting for a three-way type of interaction between teachers, parents, and administrators with respect to S.I.S. concerns and problems. These groups would meet monthly throughout the school year. Released-time money will be utilized to make these sessions possible.

Small group activities involving tenure staff members and S.I.S. students. These groups will be larger - perhaps around 12 members per group - six faculty and six students. These sessions will provide settings in which to interact on common problems associated with the maintenance, development, and improvement of the S.I.S. program.

Dissemination Activities

Responding to requests to give presentations to various interested groups at regional, state, and local levels.

Providing demonstration for visitors.

Circulating printed material to educators throughout the United States and foreign countries.

Serving in consultant capacity to schools interested in having an S.I.S. program.

Informing and involvement of parents with S.I.S. activities. Organize an S.I.S. parent group. Invite parents to S.I.S. meeting for purposes of orientation. Solicit parental support group who can be utilized as follows:

To act as hosts for demonstration activities.

To serve as aids to resource centers.

To participate in dissemination programs for local community service groups.

See Appendix B "Diffusion of Innovations", Egon Guba.

Get together parent groups to act as hosts for visitors.

Serve as disseminators to P.T.A. meetings, etc.

Research and Development Activities

Developing evaluation model for program to provide data for feedback. (See section V)

Use of feedback data for revision and regenerative purposes.

V. EVALUATION

This evaluation is largely formative. At this juncture there is little need for a summative evaluation as the program is being continued with local district funding. Also, the most immediate need and concern is for data relevent to improving the program.

There was no attempt to retrieve hard data concerning the primary objectives, viz., the building of greater responsibility and self-reliance. The elusive nature of the objectives coupled with the newness of the program makes the job of retrieving relevant hard data extremely difficult if not premature. Until this last June, 1969 there has been but one graduating class of seniors, 183 of which had been in the program anywhere from a maximum of one and one half years to less than one semester. (For a detailed account of the evaluation rationale see Appendix C.)

The nature of the data sought and presented in this evaluation has come about through attempts to respond to some of the questions most frequently asked about the program by those directly involved such as: members of the local staff - teachers and administrators, parents of the students in the program, district administrative personnel, and by those indirectly involved such as visitors to the program at the local scene and by members of audiences away from the local

scene during the times I have been asked to make presentations at various district workshops and institutes. At this time it is the answers to these questions which I feel are most pertinent to improving the present program and which, after all is my purpose for evaluating in the first place.

Academically speaking, what kinds of students were on S.I.S.?

At the end of the first year of the program, June, 1967, a comparison was made of S.R.A. High School Placement test scores of S.I.S. students with the rest of the student body. This comparison is shown in Table 1.

Table 2 contains a like comparison of Iowa Tests of Educational Development results, made at the same time, June, 1967.

Additional comparisons were made at the end of the third year of the program, June, 1969. This comparison includes only the composite scores of the Iowa tests of Educational Development and the S.R.A. High School Placement tests I.Q. scores. The results of this latest comparison are in Table 3.

Table 1 -- High School Placement Test Results June, 1967

Sub-Tests	School Averages		S.I.S. Students	
N = 187		percent iles		percent iles
I.Q.	109	71	118	86
Reading - Grade Equivalent/ %ile	9.3	55	10.7	75
Arithmetic - G.E. / %ile	9.4	60	10.9	80
Language Arts - G.E. / %ile	10.2	67	11.4	83
Composite - G.E. / %ile	9.6	64	11.0	84

Table 2 -- Iowa Tests of Educational Development Results June, 1967

	N = 142	
Test	S.I.S.	Elk Grove High School
#1	20.69	15.5
*	(82-91)	(54-71)
#2	20.94	16.7
*	(75-87)	(47-65)
#3	17.88	15.7
*	(71-86)	(53-73)
#4	20.68	15.3
*	(82-91)	(59-72)
#5	21.00	16.35
*	(81-89)	(61-73)
#6	21.44	16.80
*	(81-89)	(62-75)
#7	20.44	15.45
*	(78-89)	(54-69)
#8	20.13	17.05
*	(78-89)	(59-76)
Comp.	21.48	16.85
*	-----	-----
#9	22.04	16.85
*	(83-91)	(65.78)

* Percentile Bands in Parenthesis.

The I.T.E.D. results are expressed in standard score units.

Table 3 - Iowa Tests of Educational Development and S.R.A. High School Placement Test I.Q. Results

	Class of 1969			Class of 1970		
	S.I.S. Students 68-69	S.I.S. Students 66-67	Entire Class Av. for this class	S.I.S. Students 68-69	S.I.S. Students 66-67	Entire Class Av. for this class
I.T.E.D. Mean Composite Score	18.8 N=252	21.5	16.7	17.2 N=313	21.48	15.7
H.S.P.T. I.Q. Mean	112.5 N=161	118	109	113.9 N=295	118	111

	Class of 1971			Class of 1972		
	S.I.S. Students 68-69	S.I.S. Students 1st. yr of program. 66-67	Entire Class Av. for this class	S.I.S. Students 68-69	S.I.S. Students 1st. yr. or program. 66-67	Entire Class Av. for this class
I.T.E.D. Mean Composite Score	18.7 N=222	21.5	16.7	not tested until sophomore year	21.5	not tested until sophomore year
H.S.P.T. I.Q. Mean	119.1 N=201	118	113	112.4 N=94	118	115

The first year of the program the S.I.S. students were a select group, being somewhat superior in both academic ability and achievement.

Although the S.I.S. students were still a somewhat superior group this past school year, 1968-1969, they were a less select group than during 1966-1967. This is understandable when one takes into consideration that there were about 1100 students in the program during 1968-1969, and about 200 during 1966-1967. This is better than a 5 to 1 ratio and represents about one-half the student population.

What has been the effect of the S.I.S. Program on student academic performance? Specifically, what has the program done to the grades?

This has been one of the most, if not the most frequently asked questions. The concern for grades is an extremely deep concern. "Rightly" or "Wrongly" grades have become the prime evaluator for most academic programs. And, so long as the colleges and universities continue to use grades as a selection criterion we can't risk jeopardizing our students academic careers by making like they're of little or no consequence.

An analysis of what happened to the S.I.S. students' grades the first year of the program, 1966-1967, is reproduced in table 4.

An analysis of grade point averages (G.P.A.'s) for the school years 1966-1967 and 1967-1968 is reproduced in table 5.

Table 6 shows what happened to S.I.S. students in each of four grade point categories during the first and second semesters of 1967-1968, the second year of the program. The table reads as follows:

During the 1st semester 21 per cent of the S.I.S. students in the class of 1970 had grade point averages between 1.000 and 2.999. There were 22 per cent, or 46 in this category the second semester. There were 84 or 45 per cent in the 3.000-3.999 category the first semester and 98 or 47 per cent the second semester, etc., etc.

Grades and Grade Unit Movement

A Grade Unit Movement is defined as any grade in any subject which moved up or down from the end of the first semester to the end of the second semester. Thus if a student received a first semester grade of B in U.S. History and a second semester grade of C in U.S. History this would be considered one negative Grade Unit Movement. If the first semester grade of B changed to a second semester grade of A this would constitute one positive Grade Unit Movement. A change in semester grades from B to D would constitute 2 Grade Movement Units, etc.

A comparison of Grade Unit Movements of students on S.I.S. with the rest of the Elk Grove High School student body is presented in Table 4. A random sample of 206 students, none of which were on S.I.S. was selected to represent the student body. The random sample was selected by using a table of random digits.

Table 4

Class		Negative Grade Unit Movements		Positive Grade Unit Movements		Total	
		Number	Percent	Number	Percent	Number	Percent
1970	S.I.S. Students N-45	27	49	28	51	55	100
	Sample; N=106	109	67	53	33	162	100
1969	S.I.S. Students N=63	73	66	38	34	111	100
	Sample; N=56	58	63	34	37	92	100
1968	S.I.S. Students N=79	51	62	31	38	82	100
	Sample; N=44	39	68	18	32	57	100
Total	S.I.S. Students N=187	151	61	97	39	248	100
	Sample; N=206	206	66	105	34	311	100

With the exception of the class of 1970, the classes of 1969 and 1968 are similar. The students on S.I.S. apparently follow the other students in their Grade Unit Movements. The class of 1970 S.I.S. students was more positive in their Grade Unit Movements than the members of class of 1970 in the random sample.

Table 5

G.P.A. comparison for S.I.S. students during the school years 1966-1967 and 1967-1968.

Class	School Year 1966-1967	School Year 1967-1968
1968	N = 179 Mean G.P.A. 3.49	N = 180 Mean G.P.A. 3.58
1969	N = 231 Mean G.P.A. 3.68	N = 238 Mean G.P.A. 3.66
1970	N = 184 Mean G.P.A. 3.56	N = 207 Mean G.P.A. 3.57

TABLE 6

Grade Point Analysis

Grade Point Averages	Class of 1970		Class of 1969		Class of 1968	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
1.000 - 2.999	21%/39	22%/46	19%/44	18%/42	28%/51	22%/39
3.000 - 3.999	45%/84	47%/98	45%/105	49%/117	42%/76	48%/87
4.000 - 4.999	31%/57	29%/60	33%/77	32%/76	28%/51	29%/51
5.000	2%/4	1%/3	2%/5	1%/3	½%/1	½%/1
Totals 1st sem 594 / 2nd sem 625	184	207	231	238	179	180

What was the average per cent of their authorized time students self-imposed from their classes?

A mathematically determined random sample of 221 students was asked to keep a log for one week of those classes from which they self-imposed together with the amont of time they were out of class. These logs were issued to the students at the rate of 20 per week for 10 weeks throughout the 1968-1969 school year. Table 7 represents an analysis of these logs by class. Table 8 represents a detailed breakdown by subject matter area, what classes the students self imposed from the most often.

Table 7

Class	Number in sample	Average per cent of their authorized time students chose to S.I.S.	
1969	83	29	N = 83
1970	85	21	N = 85
1971	53	20	N = 53

Table 8

Class	Subject	No. of Students In Sample	Per cent of Sample	Average Per cent of Authorized Time
1969	Art	7	9	36
1970	Art	2	2	60
1971	Art	0	0	0
1969	Bus. Ed.	7	9	47
1970	Bus. Ed.	14	17	36
1971	Bus. Ed.	6	13	30
1969	English	42	53	37
1970	English	44	53	37
1971	English	20	44	28
1969	Foreign Language	16	20	53
1970	Foreign Language	16	19	40
1971	Foreign Language	8	18	55
1969	Home. Ec.	9	11	43
1970	Home. Ec.	7	8	37
1971	Home. Ec.	0	0	0
1969	Mathematics	17	21	52
1970	Mathematics	12	14	29
1971	Mathematics	6	13	20
1969	Science	15	19	29
1970	Science	17	21	31
1971	Science	23	51	41
1969	Shop	4	5	37
1970	Shop	2	2	50
1971	Shop	1	2	20

Table 8 (continued)

Class	Subject	No. of Students In Sample	Per cent of Sample	Average Per cent of Authorized Time
1969	Social Studies	49	62	33
1970	Social Studies	51	62	43
1971	Social Studies	13	29	35
1969	Study Hall	35	42	88
1970	Study Hall	33	39	58
1971	Study Hall	4	7	100
1969	Study Module	29	35	76
1970	Study Module	29	34	68
1971	Study Module	9	17	73

The conservatism of the students in the amount of time they were self imposing from class was noted by the coordinator early in this 1968-1969 school year. A number of S.I.S. students were interviewed concerning this. It was suggested to the students that since they used their S.I.S. privileges so little that they withdraw from the program. They reacted to this suggestion very negatively and maintained that the important thing here was not how much or how little they used S.I.S. but that they were able to maintain control over when <u>they</u> wanted to exercise the privilege. They wanted to decide for themselves how to appropriate their time while in school.

It may be noted here that this is one of the basic differences between the S.I.S. program and flexible modular scheduling. In flexible modular scheduling the students have a certain per cent of so called un-structed time, when they are supposedly free. To make certain that students use their free time, it is not at all unusual for administrators to supervise the students during these periods of unscheduled time.

It should also be noted that these are not uncontaminated percentages. The students were not in 100 per cent complete control of how often they S.I.S.'d. There was faculty intervention and at present time there is no data to indicate the degree of this intervention.

Data will be sought concerning this during 1969-1970. However many students participating in this phase were queried in person concerning teacher intervention and their feed-back indicated that it was not extensive. I feel these percentages are reasonably accurate.

What is the relationship between the per cent of time the students self-imposed from class and the grades earned in those same classes?

Table 9 contains data relative to this question.

Again, one must exercise caution in generalizing from this data because of the many X factors. For example: Even though the S.I.S. students, as a group are less selective than earlier in the program - see tables 1 & 2 they nevertheless are still a select group. Most of the faculty would not have permitted any but their more competent students to participate in the S.I.S. program. Many of these students are upper echelon grade achievers, grouped in fast, accelerated, or honors classes where grades are more difficult to earn.

The data tells nothing concerning the extent of faculty intervention when the students were desiring to self-impose, nor do we have any way to measure the independent variance relevant to faculty prejudice, one way or the other, toward S.I.S. students and the effect this had on grading.

The data tells us nothing about how many of the students in the sample raised or lowered their grades from the first to the second semester.

The above are but a few of the many reasons for observing caution.

TABLE 9

* Full time S.I.S. students
** Part time S.I.S. students

Class	Subject	No. in Sample	% of Sample	Avg. % of Authoriz. time	No. & % of Grades in ea. Category									
					A		B		C		D		F	
					No.	%	No.	%	No.	%	No.	%	No.	%
1969	For. Lang.	16	20	53	*9	56	*3	19	*4	25	0		0	
1970	For. Lang.	16	19	40	*6	37	*4 **3 7	25 19 44	*3	19	0		0	
1971	For. Lang.	8	18	55	*2	25	*3 **2 5	37 25 62	**1	12	0		0	
1969	Home Ec.	9	11	43		0	*3	33	*2 **1 3	22 11 33	*2	22	*1	11
1970	Home Ec.	7	8	37		0	*2	28	*5	71	0		0	
1971	Home Ec.	0	0	0										
1969	Math.	17	21	52	*9	53	*6 **1 7	35 6 41	*1	6	0		0	
1970	Math.	12	14	29	*4	33	*3	25	*5	42	0		0	
1971	Math.	6	13	20	*1 **3 4	17 50 67	*2	33	0		0		0	
1969	Science	15	19	29	*6	24	*5	33	*3 **1 4	20 17 37	0		0	
1970	Science	17	21	31	*3 **1 4	18 6 24	*5	29	*4 **3 7	23 18 41	*1	6	0	
1971	Science	23	51	41	*1	4	*4 **7 11	17 30 47	*2 **6 8	9 26 35	*1 **2 3	4 9 13	0	

TABLE 9

Relationship between per cent of authorized time students Self Imposed from class and grades earned in those classes. Grades were obtained from second semester report cards.

* Full time S.I.S. students
** Part time S.I.S. students

Class	Subject	No. in Sample	% of Sample	Avg. % of Authoriz. time	No. & % of Grades in ea. Category									
					A		B		C		D		F	
					No.	%	No.	%	No.	%	No.	%	No.	%
1969	Art	7	9	36	*4	57		0		0	*2 **1 3	28 14 42		0
1970	Art	2	2	60	*1	50		0	*1	50		0		0
1971	Art	0	0	0										
1969	Bus. Ed.	7	9	47	*3	43		0	*4	57		0		0
1970	Bus. Ed.	14	17	36	*3	21	*1 **4 5	7 28 35	*4 **1 5	28 7 35	*1	7		0
1971	Bus. Ed.	6	13	30	*1	17	*3 **1 4	50 17 67	**1	17		0		0
1969	English	42	53	37	*10	24	*15	36	*9 **1 10	21 2 22	*3 **3 6	7 7 14	*1	2
1970	English	44	53	37	*12 **3 15	27 7 34	*8 **2 10	18 4 22	*11 **6 17	25 14 39	*1 **1 2	2 2 4		0
1971	English	20	44	28	*3 **2 5	15 10 25	*5 **2 8	25 10 35	*3 **1 4	15 5 20	*3	15	**1	5

TABLE 9

* Full Time S.I.S. students
** Part Time S.I.S. students

Class	Subject	No. in Sample	% of Sample	Avg. % of Authoriz. time	No. & % of Grades in ea. Category									
					A		B		C		D		F	
					No.	%	No	%	No.	%	No.	%	No.	%
1969	Shop	4	5	37		0	*2	50	*2	50		0		0
1970	Shop	2	2	50		0	*2	100		0		0		0
1971	Shop	1	2	20		0	*1	100		0		0		0
1969	Social Studies	49	62	33	*21	43	*13 **3 16	26 6 32	*12	24		0		0
1970	Social Studies	51	62	43	*10 **2 12	20 4 24	*21 **3 24	41 6 47	*11 **3 14	21 6 27	*1	2		0
1971	Social Studies	13	29	35	*1	8	*3 **2 5	23 15 38	*3 **2 5	23 15 38	*1	8	1 Incomplete	8%

What has been the faculties general reaction to the S.I.S. Program?

Several studies have been undertaken to retrieve data relative to this question. The first was a "before and after" additional study during the first year of the program, 1966-1967. This study is described below.

INSTRUMENT:

The eleven question survey used in both pre and post test was developed following discussion with teachers and administrators at Elk Grove High School involved in implementing S.I.S. The discussions centered on teachers feeling regarding possible implications of S.I.S. Each question was designed to measure the attitude of the staff towards a significant aspect of the S.I.S. program as determined by these discussions.

A seventeen point scale was used for each question. A score of 1 would represent the lowest negative response; 17 the highest positive response, and a score of 9 would be the middle response. The seventeen point scale was used to provide the responder with the opportunity to differentiate clearly as they recorded their attitudes. The responses of both the pre and post administered questionnaires were analyzed by a special Fortran program designed by Donald G. Morrison, Donald T. Campbell and

LeRoy Wolins to evaluate its internal consistency and single-factoredness. Internal consistency is expressed in a reliability co-efficient, single-factoredness refers to the uni-dimensionality of the questionnaire and is determined by a type of Chi Square test developed by Lawley. The internal consistency of the questionnaire was fairly acceptable, the pre test having a Kuder-Richardson Reliability of .79, and a post test of .87. The Fortran analysis revealed that both the pre and post tests were not uni-dimensional. Therefore, the results of the survey have to be interpreted with a great deal of caution. An item by item analysis using F-tests to determine differences in responses between pre and post questionnaires is shown in Table 10.

Table 10

Item No.	Pre		Post		F-Ratios	
	Means	S.D.	Means	S.D.	*Sig.	.05 level
1.	12.522	2.987	11.185	4.301	2.01	*
2.	11.299	2.990	10.385	2.771	1.80	
3.	14.746	1.709	13.544	3.026	2.79	*
4.	9.388	2.985	8.077	2.694	2.60	*
5.	10.134	2.103	8.200	2.320	5.08	*
6.	8.119	3.179	7.431	3.057	1.33	
7.	7.985	2.233	7.554	2.699	.10	
8.	8.030	2.812	7.262	2.694	1.60	
9.	9.134	2.160	8.800	2.167	.88	
10.	9.194	3.110	7.508	3.088	3.24	*
11.	12.015	2.793	10.154	3.730	3.26	
TOTAL	112.612	16.808	100.062	21.719	3.64	*

The items which apparently contributed to a greater degree than the others to the multi-dimensionality of the questionnaire were numbers 2 and 3 on the pre test and numbers 2, 3, & 7 on the post test.

This eleven question survey (Appendix D) was distributed to all certificated personnel (73) at Elk Grove High School in October 1966, prior to the actual initiation of the S.I.S. program. Sixty-seven staff members responded to all questions in this pre-test. This survey included an information section (Appendix D) that enabled us to categorize the results. Responses were recorded on I.B.M. cards along with the identifying information. Responses for each question were totaled and a mean score for each was computed. This procedure was repeated for each question using the categories derived from the identifying information. A comparison of mean scores by category were made for each question. (Table 11)

A post-test using the same attitude survey was completed by sixty-five staff members in June 1967, following nearly a full school year of involvement with S.I.S. Rreponses were recorded on I.B.M. cards, along with the identifying information for the pre-test. Totals and mean scores were computed for each question, for the total staff and for the categories determined by the identifying information.

Comparisons of means scores by categories were made for each question. (Table 12)

Comparisons were made between like categories on the pre-test with those on the post test to determine changes. A Sign Test was used to determine the significance of the attitude change. This involved the pre-post comparison by category for each of the questions and the total. This gave an N of 12, the eleven questions and the total. No other sophisticated statistical methods were employed as this study is so broad and is meant to be basically descriptive. Readers are asked to use their own judgement as to the significance of this information in relation to their own educational situation. (Tables 13 & 14)

In reporting the findings, sub group mean scores are noted only when they differ significantly, in the authors opinion, from the mean of the total group.

Table 11

PRE TEST COMPARISONS (Mean Scores)

Teaching Experiences

QUESTION	1	2	3	4	5	6A	6B	7	8	9	10	T
1-5 Yrs. EXPERIENCE	11.9	11.1	14.5	9.2	10.0	7.8	8.1	7.1	8.7	8.5	11.8	97.6
6+Yrs. EXPERIENCE	12.8	11.4	13.8	8.5	8.5	7.5	7.5	7.4	8.5	7.9	10.3	102.0

SUBJECT MATTER AREAS

QUESTION	1	2	3	4	5	6A	6B	7	8	9	10	T
ADMINIS-TRATION	14.2	12.5	13.7	8.5	9.7	9.5	8.7	9.2	11.0	7.7	12.5	105.3
PUPIL PERS SERVICES	14.0	11.7	14.7	10.6	10.5	8.9	7.6	7.8	8.7	10.8	13.6	108.8
HUMAN-ITIES	12.5	11.9	15.3	9.7	9.4	7.3	7.8	7.8	9.6	9.8	11.6	104.7
MATH-SCIENCE	12.6	10.3	14.9	9.3	10.1	7.8	7.7	7.4	8.9	8.9	11.7	90.6
SOC. STUD. FOR. LANG.	12.5	10.4	14.5	8.5	10.0	8.2	9.5	8.5	9.3	8.5	12.2	98.7
PRACT. ARTS	11.5	11.1	15.4	8.9	11.1	8.5	6.9	9.2	8.2	8.2	12.1	107.0
PHYS. ED.	10.2	11.0	13.3	9.8	10.2	7.7	7.7	7.2	7.8	9.7	10.3	93.2

Table 12

POST TEST COMPARISONS (Mean Scores)

Teaching Experience

QUESTION	1	2	3	4	5	6A	6B	7	8	9	10	T
1-5 Yrs. EXPERIENCE	11.7	9.2	13.3	7.6	7.9	7.3	7.3	7.1	9.2	7.0	10.0	109.9
6 + Yrs. EXPERIENCE	10.8	11.4	13.8	8.5	8.5	7.5	7.5	7.4	8.5	7.9	10.3	114.9

SUBJECT MATTER AREAS

QUESTION	1	2	3	4	5	6A	6B	7	8	9	10	T
ADMINIS-TRATION	10.0	11.3	11.0	9.0	9.0	10.0	9.0	7.6	8.6	9.0	10.0	117.5
PUPIL PERS SERVICES	12.3	11.7	13.8	8.6	8.8	9.3	8.8	8.6	8.9	8.1	9.9	118.9
HUMAN-ITIES	12.7	10.2	14.2	8.8	8.1	7.7	7.2	7.0	9.2	8.0	11.6	112.8
MATH-SCIENCE	9.9	10.2	13.0	6.8	6.9	6.4	7.1	6.9	8.6	6.1	8.5	109.9
SOC. STUD. FOR. LANG.	11.4	9.5	15.1	8.4	8.3	5.9	7.1	6.4	8.5	7.1	10.8	113.2
PRACT. ARTS	11.7	10.4	14.3	7.9	9.9	7.7	7.6	7.4	9.1	9.3	11.7	112.4
PHYS. ED.	9.2	10.0	11.0	8.3	8.3	7.7	7.5	7.7	7.2	7.2	9.2	104.8

Table 13

PRE-POST COMPARISON

TOTAL GROUP

QUESTION	1	2	3	4	5	6A	6B	7	8	9	10	T
PRE TEST												
N	67	67	67	67	67	67	67	67	67	67	67	67
S	830	757	988	629	679	544	535	512	612	616	805	7545
M	12.4	11.3	14.7	9.4	10.1	8.1	8.0	7.6	9.1	9.2	12.0	112.6
Post Test												
N	65	65	65	65	65	65	65	65	65	65	65	65
S	727	675	881	525	533	483	491	472	572	488	660	6504
M	11.2	10.4	13.6	8.1	8.2	7.4	7.6	7.3	8.8	7.5	10.2	100.0

Sign Test - Significance .001

Table 14

PRE-POST COMPARISONS

Teaching Experience 1-5 Years

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	31	31	31	31	31	31	31	31	31	31	31	31
Test	S	368	345	450	285	311	241	250	220	271	262	367	3408
	M	11.9	11.1	14.5	9.2	10.0	7.8	8.1	7.1	8.7	8.5	11.8	109.9
POST	N	29	29	29	29	29	29	29	29	29	29	29	29
TEST	S	338	266	385	219	228	212	220	206	266	203	289	2832
	M	11.7	9.2	13.3	7.6	7.9	7.3	7.6	7.1	9.2	7.0	10.0	97.6

SIGN TEST - Significance .006

Teaching Experience 6 + Years

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	36	36	36	36	36	36	36	36	36	36	36	36
TEST	S	462	412	538	344	368	303	285	292	341	354	438	4137
	M	12.8	11.4	14.9	9.6	10.2	8.4	7.9	8.1	9.5	9.8	12.2	114.9
POST	N	36	36	36	36	36	36	36	36	36	36	36	36
TEST	S	389	409	496	306	305	271	271	266	306	285	371	3672
	M	10.8	11.4	13.8	8.5	8.5	7.5	7.5	7.4	8.5	7.9	10.3	102.0

SIGN TEST - Significance .001

Subject Matter Areas

ADMINISTRATION

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	4	4	4	4	4	4	4	4	4	4	4	4
TEST	S	57	50	55	34	39	38	35	37	44	31	50	470
	M	14.2	12.5	13.7	8.5	9.7	9.5	8.7	9.2	11.0	7.7	12.5	117.5
POST	N	3	3	3	3	3	3	3	3	3	3	3	3
TEST	S	30	34	33	27	27	30	27	23	26	27	30	316
	M	10.0	11.3	11.0	9.0	9.0	10.0	9.0	7.6	8.6	9.0	10.0	105.3

SIGN TEST - Significance .194

PUPIL PERSONNEL SERVICES

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	10	10	10	10	10	10	10	10	10	10	10	10
TEST	S	140	117	147	106	105	89	76	78	87	108	136	1189
	M	14.0	11.7	14.7	10.6	10.5	8.9	7.6	7.8	8.7	10.8	13.6	118.9
POST	N	10	10	10	10	10	10	10	10	10	10	10	10
TEST	S	123	117	138	86	88	93	88	86	89	81	99	1088
	M	12.3	11.7	13.8	8.6	8.8	9.3	8.8	8.6	8.9	8.1	9.9	108.8

SIGN TEST - Significance .274

HUMANITIES

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	12	12	12	12	12	12	12	12	12	12	12	12
TEST	S	150	143	184	116	113	88	94	94	115	118	139	1354
	M	12.5	11.9	15.3	9.7	9.4	7.3	7.8	7.8	9.6	9.8	11.6	112.8
POST	N	12	12	12	12	12	12	12	12	12	12	12	12
TEST	S	153	123	170	106	97	92	87	84	110	96	139	1257
	M	12.7	10.2	14.2	8.8	8.1	7.7	7.2	7.0	9.2	8.0	11.6	104.7

SIGN TEST - Significance .033

MATH-SCIENCE

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	16	16	16	16	16	16	16	16	16	16	16	16
TEST	S	202	165	239	149	162	125	124	119	142	142	187	1759
	M	12.6	10.3	14.9	9.3	10.1	7.8	7.7	7.4	8.9	8.9	11.7	109.9
POST	N	16	16	16	16	16	16	16	16	16	16	16	16
TEST	S	159	104	208	109	111	103	113	111	137	98	136	1449
	M	9.9	10.2	13.0	6.8	6.9	6.4	7.1	6.9	8.6	6.1	8.5	90.6

SIGN TEST - Significance .001

SOCIAL STUDIES-FOREIGN LANGUAGE

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	11	11	11	11	11	11	11	11	11	11	11	11
TEST	S	137	114	160	94	110	90	105	93	102	93	134	1245
	M	12.5	10.5	14.5	8.5	10.0	8.2	9.5	8.5	9.3	8.5	12.2	113.2
POST	N	11	11	11	11	11	11	11	11	11	11	11	11
TEST	S	125	104	166	92	91	65	78	70	93	78	119	1086
	M	11.4	9.5	15.1	8.4	8.3	5.9	7.1	6.4	8.5	7.1	10.8	98.7

SIGN TEST - Significance .001

PRACTICAL ARTS

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	8	8	8	8	8	8	8	8	8	8	8	8
TEST	S	92	89	123	71	89	68	55	74	66	66	97	899
	M	11.5	11.1	15.4	8.9	11.1	8.5	6.9	9.2	8.2	8.2	12.1	112.4
POST	N	7	7	7	7	7	7	7	7	7	7	7	7
TEST	S	82	73	100	55	69	54	53	52	64	65	82	749
	M	11.7	10.4	14.3	7.9	9.9	7.7	7.6	7.4	9.1	9.3	11.7	107.0

SIGN TEST - Significance .194

PHYSICAL EDUCATION

QUESTION		1	2	3	4	5	6A	6B	7	8	9	10	T
PRE-	N	6	6	6	6	6	6	6	6	6	6	6	6
TEST	S	61	66	80	59	61	46	46	43	47	58	62	629
	M	10.2	11.0	13.3	9.8	10.2	7.7	7.7	7.2	7.8	9.7	10.3	104.8
POST	N	6	6	6	6	6	6	6	6	6	6	6	6
TEST	S	55	60	66	50	50	46	45	46	43	43	55	559
	M	9.2	10.0	11.0	8.3	8.3	7.7	7.5	7.7	7.2	7.2	9.2	93.2

SIGN TEST - Significance .001

FINDINGS:

I have divided my interpretation of the findings into Pre-test, Post-test, and Comparison comments. I have further divided these groups into identifying groups. The comments listed are based on my judgement of items that are significant.

PRE-TEST:

Total Group;

1. The responses were generally positive.
2. They strongly felt that much more responsibility was placed on the student.
3. They felt S.I.S. would better prepare a student for his post high school experience, but that there would be little effect on preparation for the next course sequence.
4. It is indicated that there were expectations that the quality of student work would improve.

Teaching Experience;

1. Teachers with 6 or more years of experience were more favorable in their general opinion of the program than teachers with 5 or less years experience.

2. Teachers with 6 or more years of experience were less convinced that the quality of the student work would improve or that the student would be better prepared for his post high school experience.

Subject Matter Areas;

1. The Administration and Pupil Personnel Services were most favorable in their general opinion. Physical Education was least favorable.
2. Math-Science and Foreign Language-Social Studies were less concerned about teachers responsibility than other subject matter areas.
3. Pupil Personnel Services were most strong in their feeling that students would better grasp the essential subject matter principles.
4. Humanities, Math-Science, and Physical Education were most concerned about the negative effect of the loss of classroom participation to the S.I.S. student. Other areas felt it made little or no difference.
5. All areas except Foreign Language-Social Studies felt that there would be a negative effect on the remainder of the class as the S.I.S. students were absent from class discussion.

6. The Administration felt strongly that class morale would benefit from S.I.S. Other areas saw little or no effect.
7. Pupil Personnel Services felt most strongly that S.I.S. would better prepare students both for the next sequence and post high school experiences.
8. All areas felt that S.I.S. would better prepare students for post high school experiences, but felt that there would be little or no effect on preparation for the next sequence of courses.

POST TESTS:

Total Group;

1. There was an increase in the number of negative responses related to questions concerning the S.I.S. students' loss of class participation and loss of daily teacher contact.
2. There was a general negative response to the S.I.S. students' preparation for the next sequence of courses.

Teaching Experience;

1. Teachers with 5 or less years experience express no difference in teacher responsibility while teachers with 6 or more years see an increase in this responsibility.

2. Both groups now show a negative response to the effect on S.I.S. students missing class discussion and daily teacher contact.

Subject Matter Areas;

1. Math-Science and Physical Education expressed a neutral attitude toward the program while other areas tended to the positive side.
2. Math-Science showed a strong negative attitude to loss of class discussion, loss of teacher contact, grasp of essential subject matter principles, quality of assignments, and preparation for next sequence.
3. Foreign Language-Social Studies also showed a negative response to loss of class discussion and loss of teacher contact.
4. Foreign Language-Social Studies felt most strongly that the student responsibility was increased.
5. Administration was the only area that expressed a positive response to students loss of class participation.
6. All areas except Humanities and Practical Arts expressed a negative response regarding class morale.

COMPARISON:

Total Group;

1. As indicated by the sign tests there was a significant lowering of responses in answer to every question. Responses remained to the positive side on questions 1, 2, 3, and 10, but were negative for questions 4, 5, 6A, 6B, 7, 8, 9, and total.
2. The greatest differences were in response to questions 4 (Grasp of essential Subject Matter principles), 9 (Preparation for next sequence) and 10 (Preparation for Post High School Experience).
3. Student Responsibility responses remained the highest positive response.

Teaching Experience;

5 years or less

1. There was a less positive response on every question except 7 (loss of daily teacher contact).
2. Negative responses prevailed in response to questions 4, 5, 6A, 6B, 7, and 9.

6 years or more

1. There was a less positive response to all questions except 2 (Teacher Responsibility).
2. Negative response were recorded the same as for teacher with 5 or less years experience with the addition of question 8 (Class morale).

SUBJECT MATTER AREAS:

1. The areas of Physical Education, Foreign Language-Social Studies, and Math-Science showed the most complete change to less positive responses.
2. The greatest change was in response to question 6A (loss of class participation).
3. Questions 4, 5, 6A, 6B, 7, 8, and 9 showed a general negative response, as did the total score, although question 1 (General Opinion) remained on the positive side in every case.

SUMMARY:

The findings would seem to indicate that teacher attitude toward S.I.S. became less positive after the first year of operation. Most of the negative responses centered on the students loss of daily class and teacher contact.

While there is movement toward a more negative attitude the general opinion of the program remains positive. This may seem inconsistent but may reflect values not measured in this study.

A second teacher attitudinal study was made during June of 1967 and repeated June of 1969. The results are described in Table 15.

Table 15

1966/67		1968/69			
No.	%	No.	%		
				(1)	Please check one of the following:
10	20	14	20	1.	I do not like, therefore, do not support the program.
6	12	6	8	2.	I did not initially like the program but have changed my mind and now support the program.
3	6	9	13	3.	The program does not operate in my subject area.
30	61	40	56	4.	I have supported the program from the beginning and think it is a good program.
49					
		2	3	5.	Did like it but am less favorable now.
		71			
				(2A)	S.I.S. has disturbed my classroom climate.
7	15	4	6	1.	To an undesirable degree.
15	32	33	48	2.	Somewhat, but not to an undesirable degree.
24	51	32	46	3.	Has had little or not effect on it.
1	2	0	0	4.	Has had a good effect on it.
47		69			
					If you have checked response number 1 above, please check whichever of the following apply:
				(2B)	The disturbance to my classroom climate was in the following areas:
8	15	7	20	1.	Taking attendance.
5	16	3	9	2.	S.I.S. students walking into class late.
6	19	10	29	3.	Giving out extra assignments to accomodate S.I.S. students.
5	16	3	9	4.	Making extra work because of changes that had to be made in my lesson plans.
8	25	9	26	5.	S.I.S. students leaving to self-impose.
0	0	2	6	6.	S.I.S. students coming to audit my class.
0	0			7.	Others - Please list _____
32		34			

1966/67 - No.	1966/67 - %	1968/69 No.	1968/69 %		
				(3)	The S.I.S. program has caused me
2	4	2	3	1.	An objectionable amount of extra work.
19	41	25	38	2.	Some extra work but not an objectionable amount.
25	54	39	59	3.	Very little extra work and certainly not objectionable.
46		66			
				(4)	The S.I.S. Program has
8	17	10	15	1.	Increased my discipline problems.
3	6	4	6	2.	Decreased my discipline problems.
35	76	50	78	3.	Had no effect on my classroom discipline.
46		60			
				(5)	Check any of the following which you feel apply to the S.I.S. students.
					For the most part, I find S.I.S. students to be usually
3	5	1	1	1.	Disrespectful - insolent
24	43	34	46	2.	Respectful
6	11	3	4	3.	Discourteous
23	41	36	48	4.	Courteous
56		74			
13	81	29	78	5.	Responsible in that they get their work in on time.
3	19	8	22	6.	Irresponsible in that they have to be reminded constantly and hounded to get their work in on time.
16		37			
2	5	3	7	7.	Getting better grades in my classes.
12	31	8	18	8.	Getting lower grades in my classes.
24	63	33	75	9.	Getting about the same grades as before.
38		44		10.	Add your own comments _____
				(6)	Check one of the following: A. The S.I.S. coordinator
1	2	0	0	1.	Consistantly undermines the faculty members to the students.
17	43	41	68	2.	Tries to support faculty members in their discipling of S.I.S. students.
20	51	18	30	3.	Should increase his support to faculty members in the disciplining of S.I.S. students.
1	2	1	2	4.	Should give more support to the students.
39		60			

1966/67		1968/69			
No.	%	No.	%	B.	The S.I.S. coordinator
7	22	5	8	1.	Does not give the classroom teacher enough control of the behavior of his S.I.S. students.
0	0	2	3	2.	Gives the classroom teacher too much control over the behavior of his S.I.S. students.
24	77	52	88	3.	Appears to be trying to give the classroom teacher enough control over the behavior of his S.I.S. students.
31		59			

Discussion

Some of the data of this study appears to reinforce some of the findings of the other attitudinal survey. Namely, those items relating to the teachers' support of the program, (item 1 parts 2 and 4). As in the other survey, the teachers support of the program has moved to the more conservative side with the passage of time. Perhaps this is understandable and realistic; one finds it difficult to maintain a high level of excitement and enthusiasm relating to almost any area once the honeymoon has terminated and the day to day realities have to be faced.

In addition to the above, other noteworthy changes occurred in the following areas:

2A. Disturbances to classroom climate -

There is a 9 per cent reduction in disturbances to an undesirable degree; but 16 per cent increase in moderate disturbances.

2B. Specific areas of disturbances to classroom climate -

1. A 5 per cent decrease due to taking attendance.

2. A 7 per cent decrease relative to students walking into class late.

3. A 10 per cent increase caused by having to give extra assignments to S.I.S. students.

4. A 7 per cent decrease in having to alter lesson plans.

6. A 6 per cent increase relative to S.I.S. students coming in to audit the class.

3. Extra work caused by the S.I.S. Program -

The results relating to this have remained fairly stable.

4. Relating to discipline problems -

As in number 3, the results here have remained fairly stable.

5. Character-traits of S.I.S. students -

The 1968-1969 results show that the teachers view S.I.S. students as being considerably more respectful, courteous, and responsible than disrespectful, discourteous and irresponsible. Also, the grades of S.I.S. students have remained fairly stable. There was a 12 per cent increase in this category for 1968-1969.

6A. The faculties perception of the coordinator concerning support with student discipline -

The faculty indicated a 25 per cent increase in their feeling that the

coordinator was supporting them in disciplining problems and a 21 per cent decrease in feeling that the coordinator should increase his support of faculty disciplinary incidents.

6B The faculties perception of the coordinator concerning control of S.I.S. students' behavior - The faculty indicated a 14 per cent decrease in feeling that the co-ordinator was not investing class-room teachers with enough control over the behavior of their S.I.S. students; and an 11 per cent in-crease in their feeling that the coordinator was trying to invest the classroom teacher with more control.

One of the most resistricting limitations of this survey was that there was a change in coordinators during the second year of the program and again during the third year. Coupled with this are the changes that have taken place in the make up of the faculty and in the student body.

During the first year of the program there were about 80 faculty members and about 1400 students. This last year, 1968-1969, there were about 125 faculty members and about 2350 students. There is no way to measure what effect these changes have had on the validity of the results, and yet this factor cannot be ignored when interpreting the results.

What are the parents' attitudes toward the S.I.S. program?

A mathematically determined random sample of 100 parents of S.I.S. students was obtained and interviewed via a phone call concerning their reactions to the program. A standardized procedure was developed and followed in talking with each parent. First, we identified ourselves, the purpose of the call and asked if a few minutes of time was available to talk about the S.I.S. program. The parent was then asked if he was familiar with the purpose of the program. If the parent responded with a yes, he was requested to tell what he understood the purpose of the program to be. If we were satisfied with the answer, we then proceeded with the rest of the interview. When the answer was no, we explained the program and then proceeded with the interview.

A copy of the interview card may be found in appendix D. The results of the parents' attitude survey are as follows:

Question 1 Are you familiar with the purpose of the program? 81 per cent responded with a yes, 15 per cent with a no, and 4 per cent were not sure.

Question 2 Does your child, children, ever talk about the program at home? 47 per cent responded yes, 53 per cent no. When asked what they said about the program, 92 per cent of the 47 per cent talked about

it with positive comments. 8 per cent talked about it in a neutral manner.

Question 3 How do you feel about this program? 28 per cent were unconditionally positive to the program. This means they came out with comments such as, "a great program", "all students should be able to have a program like this", "this kind of a program is really needed", etc. 45 per cent were conditionally positive. This means they commented as follows: "It's a good program provided the students can handle it." "It's a good program if grades don't go down". etc. 10 per cent were objectively negative. They did not like the program. Interesting here is that in spite of their negative reaction, they still gave their children permission to be on S.I.S. 17 per cent of the parents were non-commital - they would not commit themselves one way or the other as to how they felt.

Question 4 Do you feel the program has served its purpose and should be continued? 44 per cent responded with an unconditional yes. 36 per cent responded with a conditional yes - "yes if it doesn't hurt the students". 4 per cent were definitely negative.

16 per cent were non-commital - they wouldn't say yes or no.

Summarizing the Results:

81 per cent were familiar with the purpose of the program

73 out of 83, or 87 per cent of those who committed themselves with an answer were positive in their feelings about the program.

80 out of 84 or 95 per cent of those who committed themselves with an answer felt the program has been serving its purpose and should be continued.

What was the nature of discipline problems involving S.I.S. Students?

A log was maintained of the kinds and frequencies of discipline problems involving S.I.S. students during the 1968-1969 school year. There was a total of 152 different kinds of breeches of discipline. All of these related to one or more of the policy statements mentioned earlier in the program description. (See Table 16).

It is not to be misconstrued that this data represents a complete account of all infractions committed by S.I.S. students during this period of time. The breeches of S.I.S. policy cited are only those that were noted by members of the staff, reported to the coordinator and acted upon. A zero per cent in front of any policy statement means only that zero number was noted and reported. Also in some instances, policy statements overlap. For example, there is no overlapping in policy statement No. 3. It is explicit. However, policy statements 5, 6, & 10 overlap. It is difficult to accurately categorize the infractions relating to these statements. As an outcome of this, the coordinator plans to re-write these statements and probably to eliminate all but one of the three. Table 16 describes the nature of discipline problems involving S.I.S. students.

Table 16

No.	%		
0	0	1.	S.I.S. students are expected to attend all compulsory assemblies and to sit in their regularly assigned place in the gym.
0	0	2.	S.I.S. students are expected to attend all class (Senior, Junior, Sophomore, and Freshmen) meetings.
2	1	3.	S.I.S. students will eat lunch during their regularly scheduled lunch period.
2	1	4.	S.I.S. students will carry their I.D. card with them at all times. Students not carrying their S.I.S. identification card will not be allowed the privileges of S.I.S.
11	7	5.	Students using their S.I.S. identification cards illegally may have their S.I.S. privilege permanently revoked.
31 (9 (smoking)	20 6)	6.	Any staff member is authorized to take the I.D. card from any S.I.S. student who is committing an infraction of the school's code of conduct. The I.D. card would then be sent to the coordinator along with an explanation of the infraction.
0	0	7.	Unless authorized, S.I.S. students attending classes will be expected to be in class on time.
13	9	8.	S.I.S. students will be expected to get permission from their teachers prior to missing any class. It is the responsibility of the student to get missed assignments when they self-impose out of class.
0	0	9.	S.I.S. students will be expected to fulfill all class requirements set forth by the teacher of any subject they are self-imposing from.
7	4	10.	S.I.S. students will, at all times, engage in behavior appropriate to the activity and in a manner which enhance the learning environment of the school.

No.	%	
0	0	11. The coordinator will hold periodic mass meetings with all S.I.S. students.
2	1	12. S.I.S. students will not self-impose out of Physical Education.
10	6	13. S.I.S. students will report to their first and sixth period classes for attendance and remain for at least 10 minutes after the bell rings.
26	17	14. S.I.S. students are not to be in the halls during the last ten minutes of the period.
39	35	15. S.I.S. students may not leave the building. (Except for those areas which are authorized)
0	0	16. S.I.S. students will participate in the evaluation of the program.
0	0	17. Only FULL TIME S.I.S. students may S.I.S. out of 4th and 5th period study mods, and then only at the beginning of each mod when the other students are moving.

FULL TIME and PART TIME S.I.S. students may S.I.S. out of a 4th-5th period class only at the direction of their individual 4-5th period teachers.

What has been the effect of the S.I.S. program on those former S.I.S. students who have graduated and are presently either working or enrolled in post-high school educational programs, viz., college, Junior college, nursing, vocational and the like?

A questionnaire was mailed to members of the class of 1968 - the first graduating class - just before spring vacation, April, 1969. Of 183 questionnaires sent out, 100 were returned. This represents a 54 per cent return. The results are shown in table 17.

Table 17

S.I.S. Graduate Follow-up Study

1. What effect did S.I.S. have on your transition from high school to whatever you are now doing? (was it helpful, harmful, etc.)

Helpful	No Effect	Harmful
81 %	17 %	2 %

2. In relation to other high school graduates that you have come in contact with who have never had S.I.S., do you feel that you are better able to handle your free time?

Yes 70 %

No 23 %

Non-commital 7 %

3. Has the subject matter you missed because of self-imposing from class been harmful to you?

Yes 4 % Sometimes 1 %

No 92 % Non-commital 3 %

4. What would your recommendation be as to the future of S.I.S.

Drop it 2 %

Continue it 98 %

5. What recommendations would you make to improve the S.I.S. program?

None 20 %

Expanded Facilities 11 %

Strictor Controls 16 %

Liberalize Requirements for Admission 10 %

Limit Program to More Mature Students 15 %

More Faculty Cooperation 15 %

Limit Program to Upper Classmen 11 %

Set up a Student Tutorial Program 1 %

6. Would you recommend that other high schools have S.I.S. programs for their students?

Yes 95 %

No 2 %

Non-commital 3 %

7. Please write any other thoughts or comments you have on the program.

See question number 5

Comments:

A 54 per cent return is not impressive and there is no way to determine the degree of bias this sample represents. Consequently, caution must be observed when interpreting the data.

Summary of Evaluation

1. S.I.S. students were a somewhat intellectually and academically superior group. (Pages 21-24)
2. When considered as a group, data indicates that the S.I.S. Program does not negatively effect the grades of S.I.S. students. In individual cases some student grades have deteriorated while others have dramatically improved. (Pages 25-29)
3. S.I.S. students self-impose from their classes an average of about one-third of their authorized time. They self-impose from study halls about 75 percent of their authorized time. (Pages 30-34)
4. The relationship betwee the percent of time students self-impose from classes and grades earned has to be dealt with on an individual basis. For the most part, students were conservative in exercising their S.I.S. privileges, especially when they felt the teachers contribution was worth their time. Students resent attending classes to do "busy work" or listen to teachers read or lecture to them what they were assigned to do on their own outside of class. (Pages 35-38)
5. Generally speaking, the faculty is less enthused about the program now than they initially were. (Pages 39-61)
6. The parents attitude towards the program is positive and felt it should be continued. (Pages 62-64)
7. Discipline problems, as reported, were minimal in light of the number of students participating in the program. (Pages 65-67)
8. S.I.S. students who graduated in 1968 and who are presently working or attending college feel they have benefited from the program and that it should be continued. (Pages 68-71)

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Student/Learner Broad Objectives

Students will have the opportunity to re-evaluate their roles and relationship to the learning environment with respect to answering the following questions:

1. How much of my classroom time is spent doing "busy-work"?
2. How well can I manage my own time if given the opportunity?
3. How much can I be trusted to accept the responsibility for completing my own work with a minimum of teacher supervision?
4. How much use will I make of the opportunities to seek out various staff members for help when I need it?
5. To what extent will I use the freedom and flexibility that S.I.S. provides for me to pursue on an independent and self-motivated basis, studies that are of a particular interest to me.

Student/Learner Behavioral Objectives

1. S.I.S. students will make decisions about when they will self-impose from class.
2. S.I.S. students will be responsible for assignments they missed when they self-impose from class.
3. S.I.S. students will be responsible for any test or quiz they missed as a result of self-imposing from class.

4. S.I.S. students will conduct themselves in a manner which will enhance the learning environment of the school.
5. S.I.S. students will be given the choice to study or not study when they self-impose themselves from class.
6. S.I.S. students will be able to choose for themselves with whom they will study.
7. S.I.S. students will be able to choose where, among the permissable areas, they want to study, e.g., library, resource centers, empty classrooms, courtyard, cafeteria, etc.
8. S.I.S. students will assume the responsibility for contacting their counselors for such purposes as:
    a. vocational guidance
    b. college placement tests
    c. planning the next year's schedule
    d. making applications to college
    e. making certain they are fulfilling all requirements for graduation
    f. social-personal counseling
9. S.I.S. students will be expected to budget their time so that they hand in on time all work required by their teachers.
10. S.I.S. students will learn and observe all S.I.S. policy concerning their conduct and behavior.

APPENDIX A

S.I.S. Policy

1. S.I.S. students are expected to attend all compulsory assemblies and to sit in their regularly assigned place in the Gym.
2. S.I.S. students are expected to attend all class (Senior, Junior, Sophomore and Freshmen) meetings.
3. S.I.S. students will eat lunch during their regularly scheduled lunch period.
4. S.I.S. students will carry their I.D. card with them at all times. Students not carrying their I.D. cards will not be allowed the privileges of S.I.S.
5. Students using their S.I.S. I.D. cards illegally may have their S.I.S. privilege permanently revoked.
6. Any staff member is authorized to take the I.D. card from any S.I.S. student who is committing an infraction of the school's code of conduct. The I.D. card would then be sent to the coordinator along with an explanation of the infraction.
7. Unless authorized, S.I.S. students attending classes will be expected to be in class on time.

8. S.I.S. students will be expected to get permission from their teachers prior to missing any class. It is the responsibility of the student to get missed assignments when they self-impose out of class.
9. S.I.S. students will be expected to fulfill all class requirements set forth by the teacher of any subject they are self-imposing out of.
10. S.I.S. students will, at all times, engage in behavior appropriate to the activity and in a manner which will enhance the learning environment of the school.
11. The coordinator will hold periodic mass meetings with all S.I.S. students.
12. S.I.S. students will not self-impose out of Physical Education.
13. S.I.S. students will report to their first and fifth period classes for attendance.
14. S.I.S. students are not to be in the halls during the last ten minutes of the period.
15. S.I.S. students may not leave the building. (Courtyard excluded)
16. S.I.S. students will participate in the evaluation of the program.

APPENDIX A

Transactions

Transactions, for the most part, consist of structuring an environment for the students which will provide proper guidance; opportunities for making choices and decisions; and opportunities for assuming a greater share of the responsibility for their education. (See Part III, Purpose of Model Program Description for the Adult Learners.)

APPENDIX B

Diffusion of Innovations - Egon G. Guba

The finest research, the most innovative solutions to practical problems, the best packages of materials, can have no effect on practice if they are not diffused to the level of the practitioner. It is obvious that one cannot hope for any considerable improvement in American education unless one also pays a great deal of attention to the process of diffusion.

Diffusion has been defined in many ways. Rogers' classification of the five stages of diffusion has become classic:

1. Awareness: The individual learns of the existence of the innovation.

2. Interest: The individual seeks more information and considers the merits of the innovation.

3. Evaluation: The individual makes a mental application of the innovation and weighs its merit for his particular situation.

4. Trial: The individual applies the innovation on a small scale.

5. Adoption: The individual accepts the innovation for continued use on the basis of a previous trial[9].

Another frequently cited definition is that of Katz et al, who defines diffusion as

> . . .the (1) acceptance, (2) over time, (3) of some specific item--an idea or practice, (4) by individuals, groups, or other adopting units, linked (5) to specific channels of communication, (6) to a social structure, and (7) to a given system of values, or culture [10].

It is clear that the key element in both these definitions is to use Katz's term, the adopting unit. Both definitions also stress acceptance. Thus the end result of diffusion is the acceptance by an adopting unit, often an individual, of an "innovation"[11]. The purpose of diffusion activities is to gain such acceptance.

Diffusion activity is, of course, carried out by a diffusion agent, whom we shall refer to here simply as a diffuser. He may or may not have been involved in the development of the innovation being diffused. He may simply be a huckster who is out to "sell" the innovation wherever he can, for personal gain. We shall limit our discussion, however, to the case in which the diffuser sees himself as engaged in opening viable professional alternatives to practitioners who are confronted with problems. The innovation being diffused is conceivably one alternative way of handling the problem. The diffuser is assumed to operate within the limits of normal professional morality.

What the diffuser needs is a strategy for diffusion, i.e., some action plan which will result in the innovation involved coming to the attention of those practitioners who ought to know about it. But such a strategy is not easy to devise, because the diffuser, if he is to have a successful strategy, must pay attention to at least five sets of factors:

1. Diffusion techniques. There are essentially six modes for the diffuser to use: (a) he can tell (newsletters, papers, conference, conversations, etc.), (b) he can show (participant observation, demonstration, films, etc.), (c) he can help (consultation, service, etc. rendered on the adopter's terms), (d) he can involve (include or co-opt the adopter), (e) he can train (familiarize with the innovation through courses, workshops, T-sessions, etc.), and (f) he can intervene (i.e., invclve himself in affairs of the adopter on his (the diffuser's) terms. The diffuser will have to select from among these six that technique or combination of techniques best suited to his purpose.

2. Assumptions concerning the nature of the adopter. There are at least seven assumptions which the adopter can make about the nature of the adopter whom he seeks to cause to consider an innovation: The adopter may be viewed (a) as a rational entity who can be convinced on the basis of hard data and logical argument of the utility of the proposed innovation; (b) as an untrained entity who can be taught to perform in relation to the innovation; (c) as a psychological entity who can be persuaded; (d) as an economic entity who can be compensated or deprived; (e) as a political entity who can be influenced; (f) as a member of a

bureaucratic system who can be compelled; or (g) as a member of a profession who can be professionally obligated. A rational approach might thus, for example, lean heavily on evaluation data; a didactic approach on workshops and in-service training experiences (NDEA Institutes); a psychological approach on self-actualization devices (COPED); an economic approach on financial rewards or punishments (NDEA language laboratory equipment or withdrawal of federal funds from segregated schools), a political approach on influence-peddling; an authority approach on mandates (elementary language requirement in California); and a value approach on moral commitments (what's good for the "kids"). The diffuser will have to decide which of these approaches or combinations of approaches best fits his potential adopter.

3. Assumptions concerning the end state in which one wishes to leave the adopter. Very little attention is typically paid to the end state in which the diffuser wishes to leave his subject. This situation may arise, of course, because the diffuser is acting as a mere huckster; hucksterism may "sell" an innovation, but it may leave the adopter with very little residual propensity to adopt again. But even with well-intentioned diffusers this difficulty may arise. What is it that the practitioner should be able to do, to think, or to feel as a result of having been exposed to a diffusion strategy.

Is he to be better trained? More skillful? More knowledgeable? More open? It seems particularly ironic that this situation of carelessness about end states should be found in the field of education, which is so generally characterized by concern about behavioral outcomes and objectives. If we applied a little of our usual logic about specifying expected goals this difficulty might be largely overcome.

4. Assumptions about the nature of the agency or mechanism carrying out the diffusion activity. No sensible diffusion strategy can be evolved without careful attention to the matter of who is to carry it out. For not all strategies are within the capabilities of all agents or mechanisms, or congenial to their philosophic or political position. Constraints exist which mandate certain actions for certain agents and which prohibit other actions to them. So, for example, a regional educational laboratory, acting as a diffusion agent, is hardly in a position to use an intervention technique, since it lacks the necessary authority to do so, but telling, showing, or involving come "naturally" to it. A State Department of Education may well intervene (and indeed, may be legally mandated to do so in certain instances), but probably would be very suspicious if it attempted to use involvement.

An individual teacher can tell and show, but probably would be thought ridiculous if she set up a training experience for her fellow teachers. A university could carry out this latter function with impunity, but it must defend itself against a charge of rendering "mere" service when it attempts to use a helping technique. Since the final implementation of a strategy depends upon the agent, the strategy must be one appropriate to the agent's circumstances.

5. Assumptions concerning the substance of the invention. Obviously not all inventions are alike; they pose different problems of adoption, and this fact must be taken into account in developing an appropriate diffusion strategy. One way to view this problem is in terms of the amount of change mandated by the invention. Thus Chin characterises innovations as involving mere substitution (e.g., one textbook for another), alternation (a minor change such as lengthening the school day by 15 minutes), perturbation or variation (e.g., moving a class into a temporary mobile classroom to obviate overcrowding), restructuring (e.g., adopting team teaching), and value orientation change (e.g., replacing the teacher with a system of computer assisted instruction)[12].

Rogers talks about the characteristics of invention that make them more or less acceptable, including relative advantage (intrinsic superiority), compatability (consistency with existing values and experience), complexity (difficulty in use), divisibility (degree to which the innovation can be divided into parts and/or tried on a limited basis), and communicability (diffusability) 13 . Whether these or other ways of classifying the substances of innovations are most useful is less important at this moment than to be sure that any diffusion strategy which might be devised takes account of substance in some fashion.

We see then that the development of a diffusion strategy is no small chore, involving a number of separate considerations. Some of the involved factors are inter-related, so that for example, when the nature of the diffusion agency is defined, some techniques are more "natural" or "suitable" than are others, as we have already tried to illustrate. On the other hand, some of the dimensions are more or less independent. So for instance, it is likely that any of the techniques (with few exceptions) could be coupled with any of the assumptions one wished to make about the nature of the adopter. Consider the differences in use of techniques that might exist between two strategies which made respectively, a rational or a psychological assumption about the nature of the adopter.

The psychological approach as opposed to the rational would use "telling" less to inform about hard data than to share experience; "showing" less to illustrate solutions to problems than to demonstrate the enthusiasm of the participants; "training" less for developing skills than in sensitizing in areas of human relations, etc. Thus we see that the strategy requires an appropriate blending of the various factors to produce an effect which is directional, integrated, and effective.

The theory propounded here, if it can properly be called that, is not easy to apply. What is lacking are operational determiners of the four classes of assumptions outlined above. How can one determine which assumption about the nature of the adopter it would be wisest to make? How can one determine appropriate end states? Where are the instruments that will permit the characterization of the nature of the diffusion agent, or of the substance of the invention? And finally, given that one could determine all of these factors, how is one to tell which techniques are appropriate to the particular configuration of other factors so defined? These questions have no answers. Yet there can be little doubt that the diffuser who consciously pays attention to these factors, in however "arty" a way he may do it, will derive a better strategy than will the diffuser who fashions his strategy at random.

APPENDIX C

EVALUATION RATIONALE

Assumptions

Evaluation is an inseparable part of the higher cognitive processes and, therefore, is indispensable to intelligent behavior.

Evaluation is an essential behavioral function of an effective teaching-learning situation.

Evaluation is a vital process for efficient and directed development.

The quality of program form and function can be improved by the application of effective evaluation procedures.

Needs

The history of American education is replete with incidences of practices that have followed cycles and fads, governed by decisions based on intuition rather than objective data and rational evaluative procedures. Much that we support as innovative today is approached in this same manner.

Furthermore, the evaluation of educational processes, programs, and products usually has been subjective, intuitive, informal, and casual rather than formal, objective, and rational. This is a tradition which appears to be entrenched strongly in our culture.

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The recent increased support for our schools reflects the importance of the expectations which both the public and the profession hold for education. The continued high level of support for schools would seem to depend upon the fulfillment of these expectations. Adequate evaluation procedures are essential for the determination of the values of the various programs and practices in relation to societal values. The publics served by the schools, as well as the professionals who operate the schools, must make important educational decisions. If these decisions are to be based on valid descriptions, explanations, and understandings, a sophisticated evaluation program must be implemented and maintained.

Purpose for Evaluating S.I.S.

The nature of this evaluation design is primarily formative and secondarily summative. Providing data for feedback is crucial to the development of the program, but at the same time we need to know how successful the over-all program turns out so a final decision can be made concerning whether or not it becomes woven in the permanent educational fiber of the school. How the data from this evaluation design is to be specifically used is described as follows:

1. To provide feedback for facilitating the successful development of the program.

2. To provide data to the T & D Center Administrative Staff and Advisory Board concerning the status and progress of the program.

3. To provide data to the Administrative Staff of Elk Grove High School and High School District 214 concerning the status and progress of the program.

4. To provide data to the faculty involved with the S.I.S. program concerning the consequences of the program relative to faculty, students and school.

5. To provide data to Administrative Staff of Elk Grove High School concerning the consequences of the program relative to its effect on the faculty and students.

6. To provide data to the parents of students in S.I.S. concerning the effect the program is having upon the academic, social and personal development of their children.

Specific Roles and Responsibilities

The S.I.S. coordinator will assume the following responsibilities relative to evaluating the S.I.S. program:

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1. For developing an adequate evaluation design, in this instance, one which will provide the data needed to facilitate the continuous development, growth and refinement of the program.

2. For determining which of the S.I.S. objectives, goals or purposes are most crucial to the immediate development and which are most crucial to the long range development of the program. The coordinator will assign these goals, purposes and objectives the highest priority for evaluation.

3. For developing appropriate instrumentation as required - the coordinator will seek the help of the T & D Evaluation Team and/or outside consultant help if he needs to in order to accomplish this.

4. For gathering, processing, analyzing and interpreting the data - the coordinator will seek the help of the T & D Center Evaluation Team and/or outside consultant help when necessary.

5. For writing period reports as requested and required by the T & D Center and as required and requested by District 214 Administration.

APPENDIX D

ATTITUDE SURVEY

The following is a survey of teacher attitudes toward the

SELF IMPOSED SCHEDULE PROGRAM - (S.I.S.)

Please complete the following identifying information and then respond to the ten attitude items

Your name will be necessary because we will have a follow-up survey at the end of the year - but all responses are confidential.

DEFINITION

SELF IMPOSED SCHEDULING is an innovation in school programming that allows a student, with counselor and administrative approval, to impose on himself the school schedule he will follow on any given day. A student is assigned a schedule in the traditional manner at the beginning of the school year. If he is approved for a self imposed schedule, he may choose to attend or not attend the classes into which he is scheduled. He is responsible for the material covered by his assigned teacher and for tests and written assignments (if the teacher desires this), but, the student can accomplish this in the manner he imposes on himself.

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NO: _____

IDENTIFYING INFORMATION

NAME _____

MALE _____ FEMALE _____

AGE:

_____ 22 - 29

_____ 30 - 39

_____ 40 - 49

_____ 50 - 59

_____ 60 - 65

TEACHING EXPERIENCE:

_____ 0 Years

_____ 1 - 5 Years

_____ 6 - 10 Years

_____ 11 - 15 Years

_____ 16 - 20 Years

_____ 20 + Years

SUBJECT MATTER AREA

_____

EDUCATION:

_____ Bachelors

_____ Masters

_____ Masters + 32

_____ Doctorate

PLACE OF EDUCATION:

_____ B.A. in Illinois

_____ B.A. out of state

_____ M.A. in Illinois

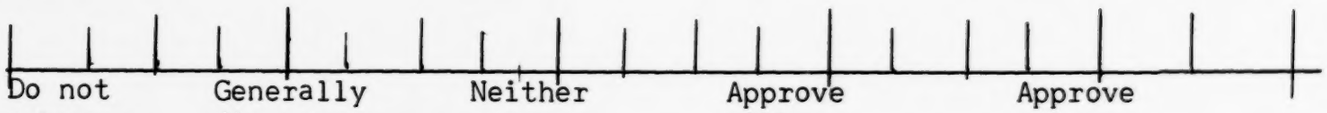
_____ M.A. out of state

APPENDIX D

A T T I T U D E S U R V E Y

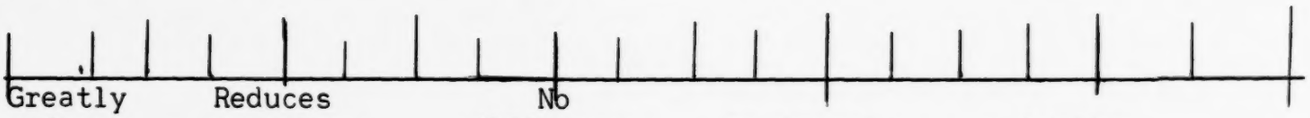
DIRECTIONS: Please express <u>your present feelings</u> to the following items by placing an X in the appropriate place on the line. Please respond to all items. Thank you.

1. PRESENT OPINION OF SELF IMPOSED SCHEDULE:



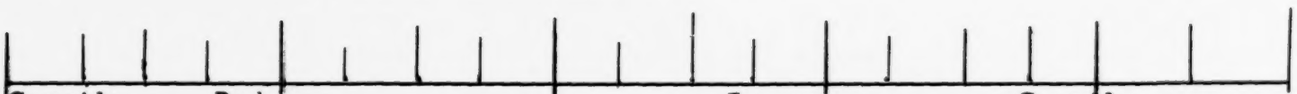
Do not approve	Generally disapprove with exceptions	Neither approve disapprove	Approve with reservations	Approve

2. TEACHER RESPONSIBILITY WITH S.I.S.:



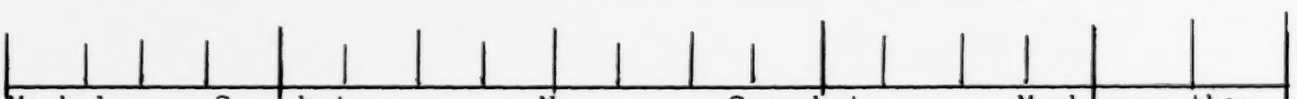
Greatly reduces responsibility	Reduces somewhat	No difference	Increases somewhat	Greatly increases responsibility

3. STUDENT RESPONSIBILITY WITH S.I.S.:



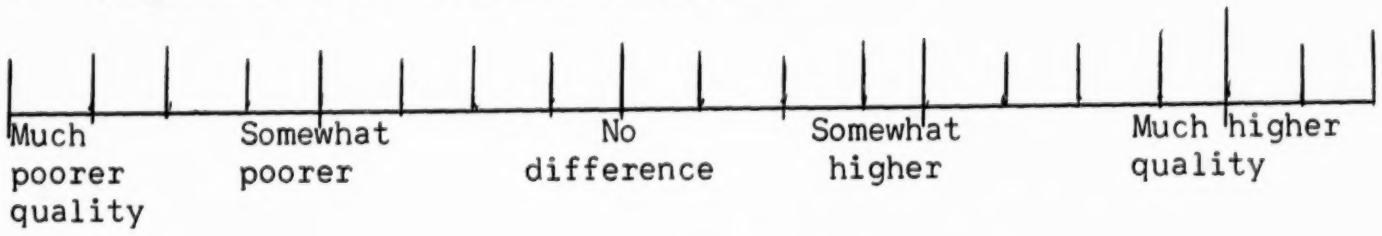
Greatly reduces responsibility	Reduces somewhat	No difference	Increases somewhat	Greatly increases responsibility

4. S.I.S. STUDENT"S GRASP OF ESSENTIAL SUBJECT MATTER PRINCIPLES:



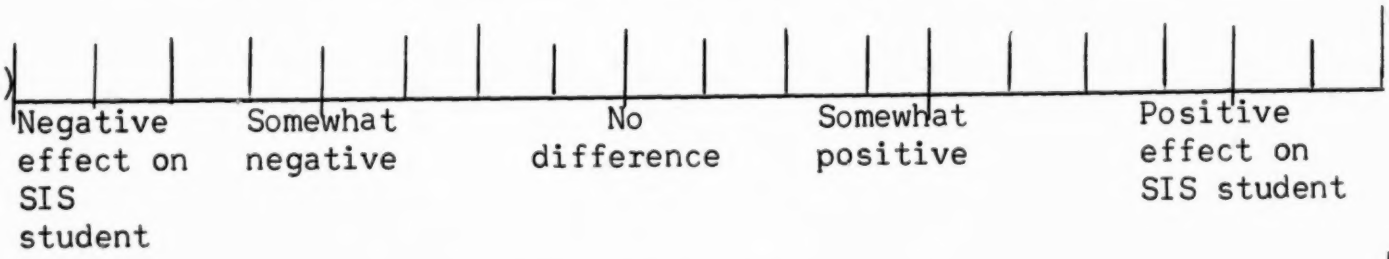
Much less than traditional program	Somewhat less than	No difference	Somewhat more than	Much more than traditional program

5. QUALITY OF S.I.S. STUDENTS ASSIGNMENTS:

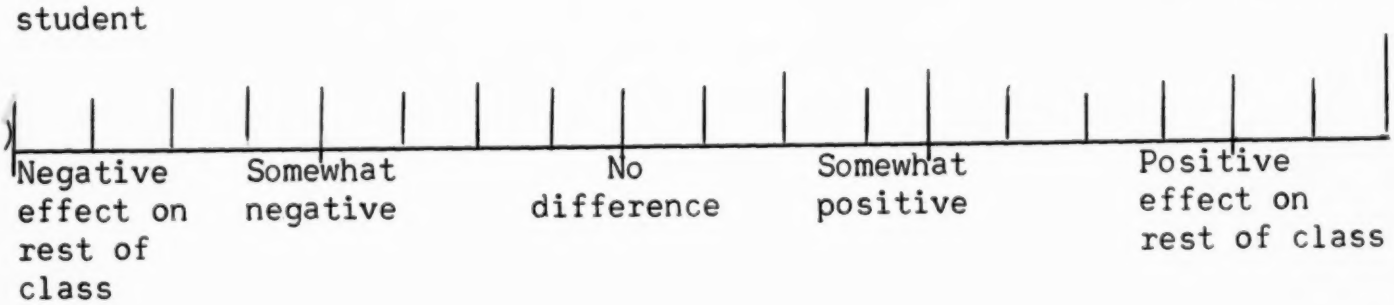


6. S.I.S. STUDENT'S LOSS OF CLASSROOM PARTICIPATION - THE EFFECT ON (A) THE S.I.S. STUDENT (B) THE REMAINDER OF CLASS

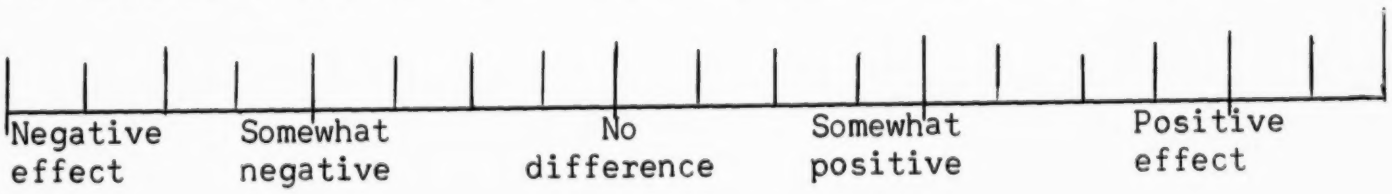
A)



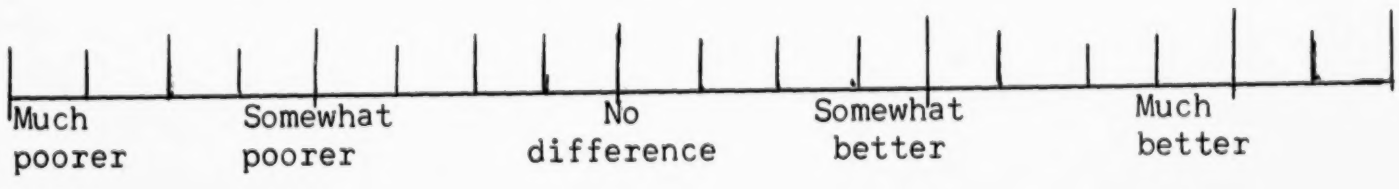
B)



7. EFFECTS OF LOSS OF DAILY TEACHER CONTACT TO S.I.S. STUDENT:



8. MORALE IN CLASSES THAT INCLUDE S.I.S. STUDENTS:



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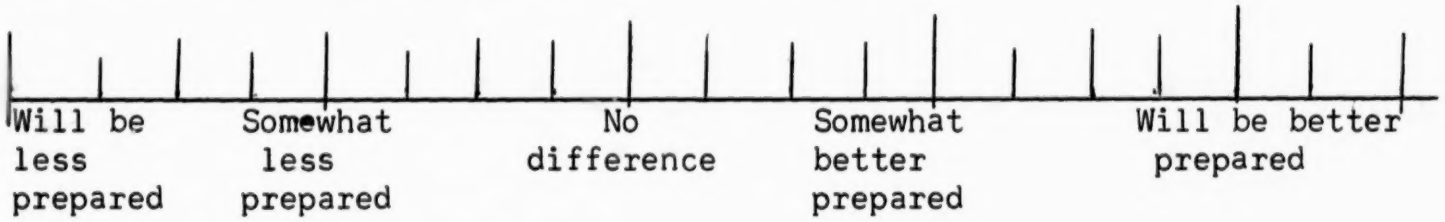
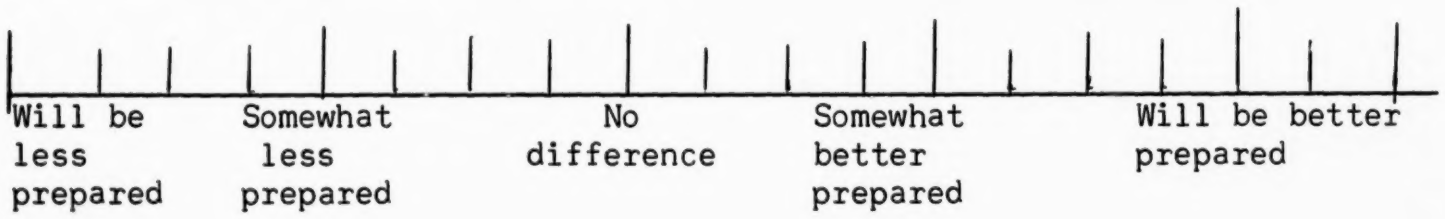
9. S.I.S. STUDENTS PREPARATION FOR NEXT SEQUENCE:



10. S.I.S. STUDENTS' PREPARATION FOR POST HIGH SCHOOL EXPERIENCES:



APPENDIX D

PARENT'S SURVEY

Name _____ STUDENT _____
Year

We are contacting parents of students on S.I.S. to get their reaction to the Program - Do you have a few minutes to respond to a few questions?

1. ARE YOU FAMILIAR WITH THE PURPOSE OF THE PROGRAM ☐ Yes ☐ No

2. DOES _____ EVER TALK ABOUT THE PROGRAM AT HOME ☐ Yes ☐ No
student

WHAT DO THEY SAY ABOUT IT? _____

_____

3. HOW DO YOU FEEL ABOUT THE PROGRAM?

_____

_____

4. DO YOU FEEL THE PROGRAM HAS SERVED ITS PURPOSE AND SHOULD BE CONTINUED?

☐ Yes ☐ No